Support Bulletin-SB-24-10018
Date-9.16.2024
Title: PWM to Servo Module Updated Setting
Product Line: NH3
Model: Sentinel
Level: Public
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Revision Letter: A

Overview: This is to help identify the correct setting that we need for the 208-06-5566Y2 PWM to Servo Module compared to the Y1 Version settings. This also highlights the modules that have the different color lights for the open and close signal.

Links to Supporting Info:

Solution:

Here is how to identify the module that you have. This is for any module that has been built since August 1st 2024.

208-06-5566Y2 module that works on 1.5.0 and newer software (needs control type Rate Servo): Processor flashes twice and a pause over 1.5 sec
Ctrl Mode: Rate Servo
Ctrl Speed: 350
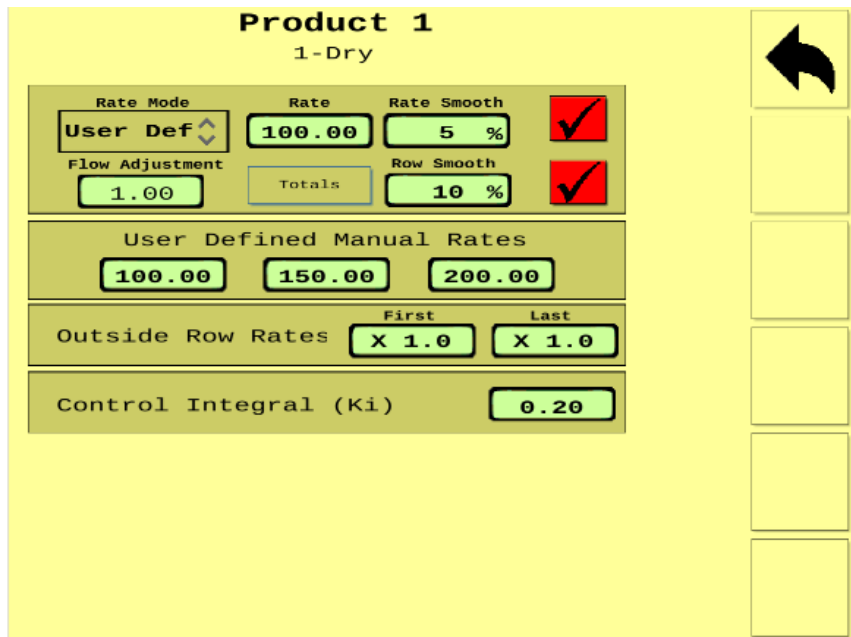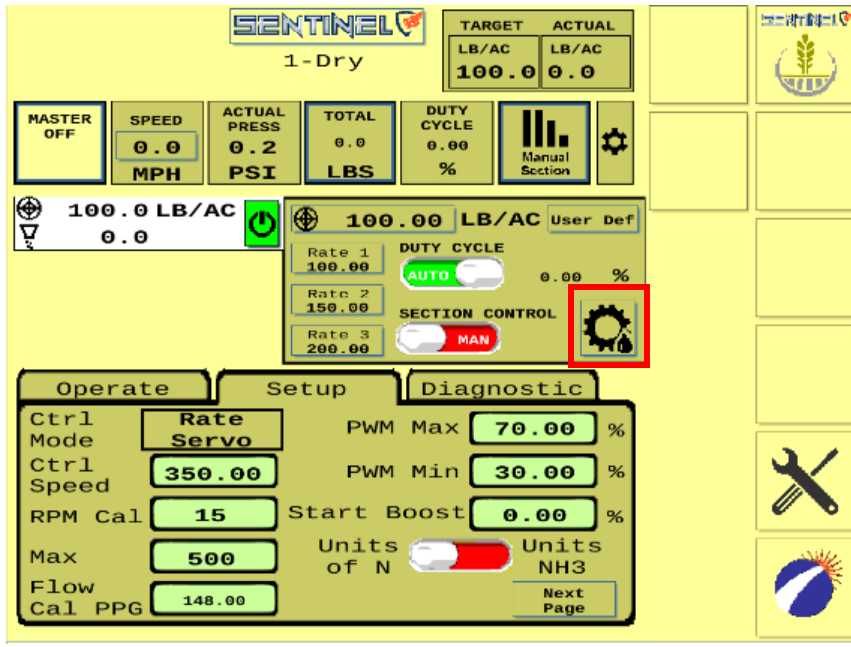PWM Max: 70 (not to exceed 97)
PWM Min: 30
Start Boost: 0
Navigate to the Rate Setup Page by touching the icon in the red box,
Rate Smooth: 5%
Control Integral (ki): 0.2

SENTINEL
1-Dry

	TARGET LB/AC	ACTUAL LB/AC
	100.0	0.0

MASTER OFF	SPEED 0.0 MPH	ACTUAL PRESS 0.2 PSI	TOTAL 0.0 LBS	DUTY CYCLE 0.00 %	Manual Section	⚙

⊕ 100.0 LB/AC ⏻
▽ 0.0

⊕ 100.00 LB/AC User Def

Rate 1 100.00
Rate 2 150.00
Rate 3 200.00

DUTY CYCLE
AUTO   0.00 %

SECTION CONTROL
MAN   ⚙

Operate	Setup	Diagnostic

Ctrl Mode	Rate Servo	PWM Max	70.00 %
Ctrl Speed	350.00	PWM Min	30.00 %
RPM Cal	15	Start Boost	0.00 %
Max	500	Units of N	Units NH3
Flow Cal PPG	148.00		Next Page

Product 1
1-Dry

Rate Mode	Rate	Rate Smooth	
User Def	100.00	5 %	✓

Flow Adjustment		Row Smooth	
1.00	Totals	10 %	✓

User Defined Manual Rates
100.00   150.00   200.00

	First	Last
Outside Row Rates	X 1.0	X 1.0

Control Integral (Ki)   0.20

208-06-5566Y1 module that was used on 1.4.x versions of software (needs control type Rate PWM): Processor flashes evenly 5 times per second
Ctrl Mode: PWM
Ctrl Speed: 300
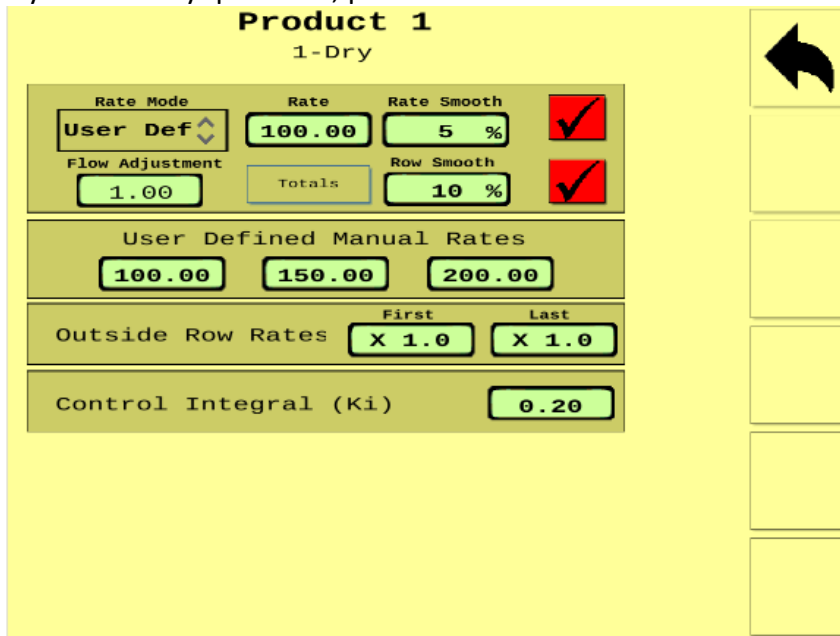PWM Max: 97
PWM Min: 4

Start Boost: 50
Navigate to the Rate Setup Page by touching the icon in the red box (left image) Set-Rate Smooth: 5%
Control Integral (ki): 0.1

Thanks for your continued business with SurePoint Ag Systems.

If you have any questions, please contact our office at 866-626-3670

PWM to Servo Module Diagnostics Lights

Normal Operations- Yellow/Blue changing as you go through the field
Red: Either master is off or the PWM signal is too low and the valve will remain in the same position.
Yellow(Modules built on 10/7/2024, 11/22/24, and 12/20/2024 are purple): The valve is being commanded to shut
Blue(modules built on 10/7/2024, 11/22/24, and 12/20/2024 are green): The valve is being commanded to open